GOLF PRACTISING DEVICE HAVING DISPLAYING DEVICE

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a golf practising device, and more particularly to a golf practising device having a displaying device for showing or displaying the moving or the positions of the ball.

2. Description of the Prior Art

Various kinds of typical golf practising devices have been developed for allowing the users to practise swinging or putting at home. However, none of the typical golf practising devices provide a displaying device to display the positions or the movement of the golf balls along the golf court.

The present invention has arisen to mitigate and/or obviate the afore-described disadvantages of the conventional golf practising devices.

SUMMARY OF THE INVENTION

The primary objective of the present invention is to provide a golf practising device including a displaying device for showing or displaying the moving or the positions of the ball.

In accordance with one aspect of the invention, there is provided a golf practising device comprising a base including a first end for supporting a ball to be swung or put by users, and including a second end, a plurality of sensors disposed along the base for

sensing a movement of the ball along the base, a displayer device, and a processor device coupled to the sensors for receiving signals from the sensors and for treating the signals from the sensors and for sending treated signals to the displayer device and to be displayed on the displayer device.

The base includes at least one side having a fence disposed thereon, the sensors are disposed on the fence and facing toward the base. The fence includes a plurality of bars secured together.

A first of the bars includes a cavity formed therein, and a second of the bars includes a tongue extended therefrom and engaged into the cavity of the first bar for securing the first bar and the second bar together.

The first bar includes a first terminal disposed in the cavity thereof, and the second bar includes a second terminal disposed on the tongue for engaging with the first terminal when the tongue is engaged into the cavity of the first bar.

A housing is further provided and disposed on the second end of the base for supporting the sensors. The housing includes an upper panel for supporting the sensors, the sensors are facing downward toward the base.

The housing includes an indicator disposed on the upper panel for aiming purposes. The housing includes

at least one side panel having a cavity formed therein, the fence may include a tongue extended therefrom and engaged into the cavity of the side panel for securing the fence to the side panel of the housing.

The side panel includes a first terminal disposed in the cavity thereof, and the fence includes a second terminal disposed on the tongue for engaging with the first terminal when the tongue is engaged into the cavity of the side panel. The processor device is secured onto the side panel of the housing.

Further objectives and advantages of the present invention will become apparent from a careful reading of a detailed description provided hereinbelow, with appropriate reference to accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a golf practising device in accordance with the present invention;

FIG. 2 is a top plan view of the golf practising device;

FIG. 3 is a partial exploded view of the golf practising device;

FIG. 4 is a perspective view illustrating the other embodiment of the golf practising device;

FIG. 5 is a flow chart illustrating the operation of the golf practising device; and

FIGS. 6, 7, 8, 9 are plan views illustrating the pictures or the views or the scenes displayed on the

displayer of the golf practising device.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, and initially to FIGS. 1-3, a golf practising device in accordance with the present invention comprises a base 10 having a course upper surface for simulating the golf court or the green of the golf court. Two fences 20 are disposed on the two sides of the base 10 respectively, and each includes one or more bars 21 engaged or secured together with tongues 22 and cavities 23. For example, some of the bars 21 may include one or more tongues 22 extended therefrom for engaging into the cavities 23 of the other bars 21, and for allowing the bars 21 to be secured together with such as a force fitted engagement.

The fences 20 or the bars 21 each includes one or more detectors or sensors 24 disposed therein and facing toward the base 10, for detecting or sensing the movement or the position of the golf ball that moves through the base 10. The bars 21 may include one or more electric wires engaged therein, and may include one or more terminals 25, 27 disposed in the cavities 23 thereof and/or disposed on the tongues 22, for allowing the terminals 25, 27 to be engaged with or contacted with each other for electrically coupling the sensors 24 together. Alternatively, as shown in FIG. 4, one or more bulges 26 may be disposed or provided on

the sides of the base 10 and each may include a detector or a sensor 24 disposed therein and facing toward the base 10.

A housing 30 may be disposed on one end of the base 10, particularly disposed on the end distal to the end that is provided for swinging or putting practising purposes. A number of detectors or sensors 31 are disposed in an upper panel 34 of the housing 30 and facing downward toward the base 10 for detecting or sensing the movement or the position of the golf ball that moves through the base 10 and the housing 30. The housing 30 may include one or more cavities 32 formed in each of two side panels 36 thereof, and may include a terminal 25 engaged in each of the cavities 32 thereof for engaging with the other terminals 26 provided on the tongues 22 of the bars 21 of the fences 20 and for electrically coupling to the sensors 24. The housing 30 may include an indicator 33 or a target or the like, for allowing the users to aim the housing 30 or the hole of the golf court.

A processor device 40 may be provided and attached to one of the side panels 36 of the housing 30, and may be coupled to an electric power source with a cable 41 and/or a plug, and may include the other cable 42 for coupling to the displayer device 50. The displayer device 50 includes a screen 51 for showing or displaying the green or the golf courts. The detectors

or the sensors 24, 31 are coupled to the processor device 40 which may receive the signals from the sensors 24, 31 and which may process or calculate or treat the signals and send the signals to the displayer device 50 and to be displayed in the displayer device 50. The sensors 24, 31 may also be disposed along the base 10 in the other arrangements.

Referring next to FIG. 5, in operation, when the processor device 40 is energized or started at 70, the users may set or select the playing court at 71, the selected playing court will be displayed on the screen 51 of the displayer device 50, as shown in FIG. 6. The users may then dispose the ball on the end of the base 10, distal to the housing 30, at 72. Some of the sensors 24 may then detect or determine whether the ball has been disposed on the correct position or not at 73. The screen 51 of the displayer device 50 may include one or more indicating lights provided thereon which may generate flash lights to indicate or to warn the users that the ball has not been disposed on the correct position. The indicating lights will not generate flash light, for example, when the ball has been disposed on the correct position.

The users may then practise swinging or putting or the like, at 74, in order to force the ball to move through the base 10 and/or toward the housing 30. The sensors 24, 31 may detect or sense the movement or the

positions of the ball at 75, and may send the signals to the processor device 40, which may then treat or process or calculate the signals at 76, and which may then send the calculated or treated signals to the displayer device 50 and to be displayed on the screen 51 of the displayer device 50 at 77. For example, the movement or the new position of the ball will be shown in the screen 51, such as that shown in FIG. 7.

The ball may be detected or sensed and may be determined whether the ball has been moved into the hole or not at 78. If the ball has been moved into the hole, the users may then set or select the other playing court at 79, and the set or the selected new playing court may be shown in the screen 51 of FIG. 6, at 80.

In the process 78, when the ball has not been moved into the hole, the screen 51 may show or may display the new position of the ball, or may show the distance between the ball and the hole, or may show the direction of the ball toward the hole, at 81, as shown in FIG. 8. The users may choose to enlarge the scene at 82, in order to have the screen 51 to more clearly show the position of the ball relative to the hole, as shown in FIG. 9. The users may then dispose the ball on the end of the base 10, distal to the housing 30, at 72, for practising the other or the further swinging or putting operations.

In operation, the processor device 40 may receive the signals from the sensors 24, 31 and may treat the signals and send the treated signals to the displayer device 50 and to be displayed on the screen 51 of the displayer device 50. The users may thus practise swinging or putting by viewing the screen 51 of the displayer device 50.

Accordingly, the golf practising device in accordance with the present invention includes a displaying device for showing or displaying the moving or the positions of the ball.

Although this invention has been described with a certain degree of particularity, it is to be understood that the present disclosure has been made by way of example only and that numerous changes in the detailed construction and the combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as hereinafter claimed.